International Application No PCT/\_\_2004/050976

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B21D53/64 B26B21/56 B26B21/22 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 B21D B26B Documentation searched other than minimum documentation to the extent that such documents are included. In the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with Indication, where appropriate, of the relevant passages Relevant to claim No. Α US 5 010 646 A (NEAMTU NICOLAE) 1 30 April 1991 (1991-04-30) cited in the application column 1, line 51 -column 3, line 34; figures 3,4 US 4 302 876 A (EMMETT JAMES S) 1 Α 1 December 1981 (1981-12-01) cited in the application column 6, line 28-33; figures 7,8 US 3 431 624 A (PICKEL JAMES BRENNAN) 7,10 11 March 1969 (1969-03-11) column 2, line 65 -column 3, line 9; figure 1 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or involve an inventive step when the document is taken alone which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the \*O\* document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docuother means ments, such combination being obvious to a person skilled \*P\* document published prior to the international filing date but in the art. later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 16 September 2004 05/10/2004 Name and malling address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Rattenberger, B Fax: (+31-70) 340-3016

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IPC 7 B21D53/64 B26B21/56 B26B21/22 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) B21D B26B IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included. In the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with Indication, where appropriate, of the relevant passages Relevant to claim No. US 5 010 646 A (NEAMTU NICOLAE) Α 1 30 April 1991 (1991-04-30) cited in the application column 1, line 51 -column 3, line 34; figures 3,4 US 4 302 876 A (EMMETT JAMES S) A 1 1 December 1981 (1981-12-01) cited in the application column 6, line 28-33; figures 7,8 US 3 431 624 A (PICKEL JAMES BRENNAN) 7,10 11 March 1969 (1969-03-11) column 2, line 65 -column 3, line 9; figure 1 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance invention "E" earlier document but published on or after the International "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or involve an inventive step when the document is taken alone which is clied to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the O document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docuother means ments, such combination being obvious to a person skilled in the art. \*P\* document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 05/10/2004 16 September 2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Rattenberger, B Fax: (+31-70) 340-3016

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